

Scaled data based on original data using  
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State  
Lighting Products

Test Report Prepared for  
Cooper Lighting Solutions  
(formerly Eaton)

Brand: METALUX

Report Number: P294132

Luminaire Tested: **24GR-LD5-48-A19/156-UNV-L92765-W2A1-U-6500K**

Issue Date: 3/3/2020

**Test Information**

Test Method: LM-79-08  
Report Number: P294132  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P33308)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: 24GR-LD5-48-A19/156-UNV-L92765-W2A1-U-6500K  
Description: GRLED 2x4 TUNABLE WHITE TROFFER  
WITH A19/156 LENS  
Light Source: (336) 90 CRI LEDS TUNED TO 6500K CCT  
Ballast/Driver: ELECTRONIC DRIVER

**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4479.0 lumens  
Efficiency: N/A  
Efficacy: 130.2 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.25  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

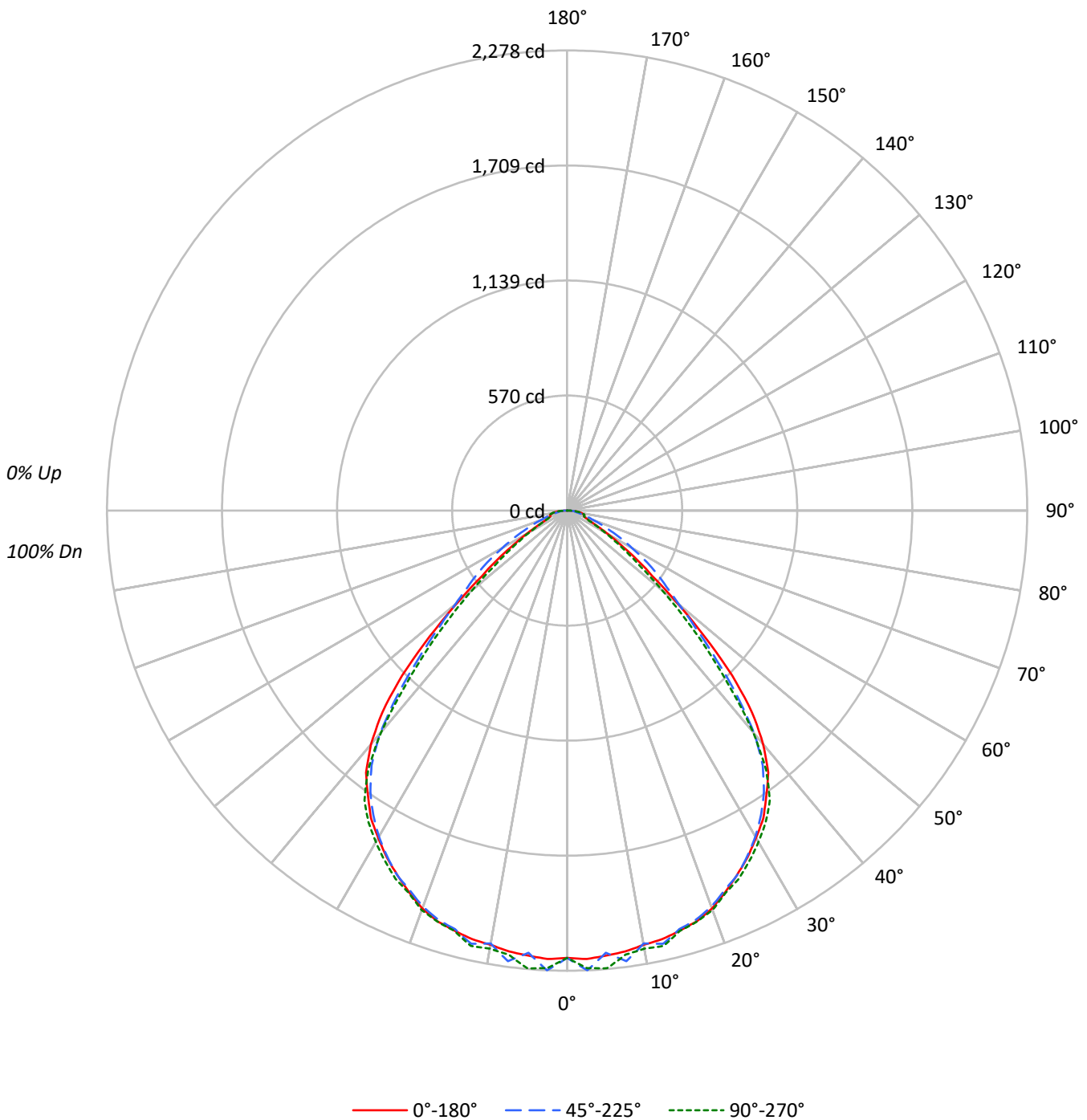
Input Watts (W): 34.41  
Input Voltage (V): 120  
Input Current (A<sub>in</sub>): NR  
Voltage Rise (V): NR  
Power Factor: NR  
Total Harmonic Distortion (THDi): NR  
Frequency (hertz): 60  
Stabilization Time: NR  
Operation Time: NR  
Ambient Temperature (°C): NR  
Test Distance: 25 FT



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### Luminous Intensity Polar Plot





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**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20					20					20					20					20					
RC	80					70					50					30					10					0
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
RCR																										
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100					100			
1	111	107	103	100	108	105	102	99	101	98	96	97	95	93	93	92	90					88				
2	103	96	90	86	100	94	89	85	91	86	83	88	84	81	85	82	79					77				
3	95	86	79	74	93	85	78	73	82	77	72	79	75	71	77	73	70					68				
4	88	78	71	65	86	77	70	64	74	68	64	72	67	63	70	66	62					60				
5	82	71	63	57	80	70	62	57	68	61	56	66	60	56	64	59	55					53				
6	76	65	57	51	75	64	56	51	62	55	50	60	55	50	59	54	50					48				
7	71	59	51	46	70	58	51	46	57	50	45	56	50	45	54	49	45					43				
8	67	55	47	42	65	54	47	41	53	46	41	51	45	41	50	45	41					39				
9	63	50	43	38	61	50	43	38	49	42	38	48	42	37	47	41	37					36				
10	59	47	39	35	58	46	39	35	45	39	34	44	38	34	44	38	34					33				

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	2980	2980	2980
5°	2986	2967	3072
10°	2982	2973	3009
15°	2999	2989	3001
20°	3001	2989	3014
25°	2955	2957	2986
30°	2906	2897	2944
35°	2824	2790	2873
40°	2652	2533	2519
45°	2198	1989	1886
50°	1479	1509	1289
55°	975	1266	845
60°	625	999	579
65°	403	762	392
70°	356	546	356
75°	460	434	464
80°	563	373	590
85°	655	556	689



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	212.1	4.7
10°-20°	608.9	13.6
20°-30°	916.7	20.5
30°-40°	1062.5	23.7
40°-50°	830.0	18.5
50°-60°	443.2	9.9
60°-70°	227.9	5.1
70°-80°	128.9	2.9
80°-90°	49.0	1.1
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	1737.6	38.8
0°-40°	2800.1	62.5
0°-60°	4073.2	90.9
0°-90°	4479.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	4479.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2215	2215	2215	2215	2215	
5°	2211	2273	2197	2257	2274	210
15°	2153	2166	2146	2159	2154	608
25°	1990	1984	1992	1989	2011	917
35°	1719	1711	1698	1732	1749	1072
45°	1155	1156	1045	1036	991	871
55°	416	526	540	486	360	384
65°	127	264	240	263	123	139
75°	88	166	83	155	89	90
85°	42	55	36	55	45	44
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	2214.7	2214.7	2214.7	2214.7	2214.7
2.5°	2221.9	2262.2	2278.0	2258.6	2267.2
5°	2211.1	2273.0	2196.8	2257.2	2274.4
7.5°	2201.1	2194.6	2250.0	2192.4	2216.9
10°	2182.4	2186.7	2175.9	2216.9	2202.5
12.5°	2173.7	2198.9	2196.8	2175.9	2207.5
15°	2152.9	2166.5	2145.7	2159.4	2154.3
17.5°	2132.0	2125.5	2123.4	2129.1	2134.2
20°	2096.1	2074.5	2087.4	2088.9	2104.7
22.5°	2044.3	2031.3	2034.2	2047.1	2048.6
25°	1990.3	1983.8	1991.8	1988.9	2011.2
27.5°	1934.2	1925.6	1930.6	1941.4	1955.1
30°	1870.2	1868.0	1864.4	1873.8	1894.6
32.5°	1806.9	1789.6	1786.8	1806.2	1829.9
35°	1719.1	1711.2	1698.3	1732.1	1749.3
37.5°	1635.7	1611.2	1590.4	1610.5	1617.7
40°	1509.8	1491.1	1442.2	1444.4	1434.3
42.5°	1355.2	1341.5	1248.0	1231.4	1203.4
45°	1155.2	1155.9	1045.1	1035.8	991.2
47.5°	922.9	963.9	867.5	856.7	790.5
50°	706.4	780.4	720.7	703.5	615.7
52.5°	530.1	638.7	620.0	582.6	461.8
55°	415.8	525.8	539.5	486.2	360.4
57.5°	312.9	433.0	455.3	411.4	278.4
60°	232.3	364.7	371.2	353.9	215.1
62.5°	172.6	310.0	301.4	303.5	159.7
65°	126.6	264.0	239.5	263.3	123.0
67.5°	103.6	228.7	186.3	228.0	100.0
70°	90.6	202.8	138.8	200.7	90.6
72.5°	87.8	186.3	110.1	178.4	88.5
75°	88.5	166.2	83.4	155.4	89.2
77.5°	81.3	136.7	63.3	132.4	84.9
80°	72.6	103.6	48.2	105.0	76.2
82.5°	61.9	75.5	38.8	77.7	64.0
85°	42.4	55.4	36.0	55.4	44.6
87.5°	20.1	33.1	22.3	31.6	23.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)